

ment of first cover portion 30 and display screen 14 and assumes the bent over configuration shown in FIG. 8. In keeping with the invention, the second or multi-media position is set at a distance d (FIG. 6) which will allow clearance between the bottom left corner of first cover portion 30 and base 20 as the first cover portion 30 and display screen 14 are rotated 90°.

It should be readily apparent to those skilled in the art that the present invention provides a portable laptop computer with a swivel arrangement located internally within a cover and connecting a first cover portion with a second cover portion. The swivel arrangement takes the form of a cam assembly translating a linear movement of a first cover portion and a display screen into a limited rotational movement of the display screen relative to a second cover portion thereby moving the display screen between at least a landscape orientation and a portrait orientation. The laptop computer thus allows a pivotal movement of a display screen along a horizontal axis as well as rotational movement about an axis perpendicular to the cover in its open position. The laptop computer display is thereby enhanced in a manner which does not add to the length and width dimensions of the computer. Unlike prior art laptop computers which have been confined to swiveling the display screen from left to right about a vertical axis orthogonal to the base to widen the visual range, the present invention markedly increases the working efficiency of the computer.

While the invention has been described with reference to a preferred embodiment, those skilled in the art will appreciate that certain substitutions, alterations and omissions may be made without departing from the spirit thereof. Accordingly, the foregoing description is meant to be exemplary only, and should not be deemed limitative on the scope of the invention set forth with following claims.

We claim:

1. A portable computer comprising:

a base;

a cover incorporating a display screen pivotably mounted to said base, said display screen having a longer dimension and a shorter dimension; and

a swivel arrangement located in said cover enabling at least a portion of said cover and said display screen to be movable relative to said base between at least two orientations, one having said longer dimension in a horizontal orientation and one having said longer dimension in a vertical orientation;

wherein said cover includes a first portion incorporating said display screen, and a second portion provided with speakers and pivotally secured to said base, said first portion being movably mounted to said second portion: wherein said second portion of said cover includes a front wall formed with front speaker ports in communication with said speakers and a back wall formed with back speaker ports in communication with said speakers; and wherein said front speaker ports are selectively opened and closed depending on the position of said first portion of said cover relative to said second portion of said cover.

2. The portable computer of claim 1, wherein said base includes a keyboard and a control processing unit.

3. The portable computer of claim 1, including a connecting wire ribbon extending between said base and said cover, said connecting ribbon lying between said first portion of said cover and said second portion of said cover.

4. The portable computer of claim 1, wherein said display screen is movable between a first position and a second

position while maintaining said one orientation having said longer dimension in said horizontal direction.

5. A portable computer comprising:

a base;

a cover movably mounted to said base between a closed position overlying said base and an open position raised over said base, said cover including a first portion incorporating a display screen and a second portion pivotably mounted to said base; and

a swivel arrangement located in said cover enabling said first portion of said cover carrying said display screen to be slidable over a linear path and rotatable relative to said second portion of said cover;

wherein said second portion of said cover includes a recessed corner segment enabling easier manipulation of said first portion of said cover.

6. The portable computer of claim 5, wherein said first portion of said cover includes a cam element fixed thereto and said second portion of said cover includes a cam track cooperable with said cam element.

7. The portable computer of claim 6, wherein said cam element is an elliptically shaped member having a shaft projecting substantially perpendicularly therefrom.

8. The portable computer of claim 7, wherein said cam track comprises an inner path formed by a continuous wall defining an elongated slot in which said shaft is slidably captured, and an outer path engageable with the periphery of said elliptically shaped member.

9. The portable computer of claim 6, wherein said cam element is provided with a pair of spaced detent notches about its periphery, and said cam track is formed with a pair of spaced detents, one of said detents being selectively engageable with one of said detent notches.

10. The portable computer of claim 9, wherein one said detents is engageable with one of said detent notches to define a first position of said display screen, the other of said detents is engageable with the other of said detent notches to define a second position of said display screen and said other of said detents is engageable with said one of said detent notches to detent a third position of said display screen.

11. The portable computer of claim 5, including a connecting wire ribbon having one end connected to said base and another end connected to said first portion of said cover, there being a slack portion between said ends.

12. In a portable computer having a base, a cover incorporating a display screen pivotably mounted to said base between a closed position overlying said base and an open position raised over said base, a method for changing the disposition of said display screen between a landscape orientation in which said display screen has a longer dimension extending in a substantially horizontal direction and a portrait orientation in which said display screen has a shorter dimension extending in a substantially horizontal direction, the method comprising the steps of:

a) providing said cover with a first portion incorporating said display screen and a second portion mounted to said base;

b) providing speakers and ports in said second portion of said cover;

c) providing a swivel arrangement in said cover enabling said first portion of said cover and said display screen to be rotatable relative to said second portion of said cover about an axis perpendicular to said cover in said open position, and to be slidable relative to said second portion in a plane parallel to said second portion of said cover in said open position;